

September 6, 2007

United States Securities and Exchange Commission
Division of Corporation Finance
Washington, DC 20549
Attn: Mr. Gary Todd, Review Accountant

RE: Comment Letter dated August 21, 2007
Form 10-K as of December 31, 2006
Form 10-Q as of June 30, 2007
File No. 000-14242

Dear Mr. Todd,

We are in receipt of your comment letter noted above. Our responses to your comments are listed below:

Form 10-K as of December 31, 2006

Financial Statements

Note 4, Investments, page F-15

Comment 1.

We see that the sale of the operations in Canada was 100% financed with a note receivable and that you continued to advance funds to that operation after the sale. Please tell us why it is appropriate to recognize a gain on a transaction that appears to have been substantially financed by Celsion. In this regard, please fully explain how your accounting considers the substance of the guidance from SAB Topic 5-U.

Response:

It is important to note that Celsion Canada Ltd (“Canada”), a Canadian corporation, is entirely independent of Celsion Corporation (“Celsion”). Canada is currently seeking funding for its operations. Celsion has not provided Canada any financial support other than the amounts advanced to Canada under the Transition Services Agreement.

On January 16, 2006, Celsion sold all of the issued and outstanding common stock of Canada to Dr. Augustine Cheung for \$1.5 million. As a result of this sale Dr. Cheung became the 100% owner of Canada. Dr. Cheung paid for the stock by issuing a promissory note to Celsion.

SAB Topic 5-U covers the sale of a business or operating assets to a highly leveraged entity – typically a newly formed and thinly capitalized corporation. This is not the case with the sale of Canada. Celsion sold 100% of the common stock of Canada to Dr. Cheung personally. The loan is repayable in accordance with a repayment schedule and is secured by 100,536 shares of Celsion common stock pledged by Dr. Cheung. Dr. Cheung paid the first installment on June 16, 2006 on time. The next installment is not due until June 16, 2008. Since Dr. Cheung has significant personal financial resources, the repayment of the loan is not in doubt. Therefore, it was appropriate to recognize the gain at the time of the sale of the stock to Dr. Cheung.

In a separate independent transaction, Celsion entered into a Transition Services Agreement with Canada. Under the Transition Services Agreement, Celsion advanced funds to Canada to finance start-up costs including salaries and benefits for certain employees, rent for space in Celsion's offices, support services (such as copier access, computer access, etc.), and minimal amounts of working capital. The initial term of the advance was through June 30, 2006 and when Canada had not been funded by that date, the term was extended to June 30, 2007. The amounts advanced under the transition services agreement are fully repayable by Canada. Celsion has no other financial ties to Canada.

Given the facts above, we believe that the recognition of the gain on the sale was appropriate as the note receivable of \$1.5 million is to an individual not the entity.

Form 10-Q as of June 30, 2007
Statement of Operations, page 6

Comment 2.

In future filings please present income (loss) per share for loss from continuing operations, income (loss) from discontinued operations and net income (loss). Refer to paragraph 37 of SFAS 128.

Response.

As requested, we will present the income (loss) per share data for continuing operations, discontinued operations, and net income in future filings.

Note 5, Note Receivable, page 12

Comment 3.

We see that you recorded an allowance for the transition services agreement receivable from your former Canadian operations. Please tell us why there is no impairment of the note receivable from the Canadian operations. Please tell us how your accounting considers the guidance from SFAS 114.

Response.

With respect to the Canada transaction, it is important to note that there are two separate agreements. The first relates to the Company's sale of all of the issued and outstanding shares of Canada's common stock. This stock was sold to Dr. Augustine Cheung (an individual) in exchange for a promissory note in the amount of \$1,500,000. To date, Dr. Cheung is current with the repayment schedule under the promissory note. Dr. Cheung has sufficient personal financial resources to fully repay the loan and has indicated to us he fully intends to make payments under the loan as they become due. Furthermore, he has pledged 100,536 share of Celsion common stock as collateral for the loan. The value of the stock on June 30, 2007 was \$672,586. This collateral combined with Dr. Cheung's personal resources provide reasonable assurance that Celsion will be fully repaid on the loan. Therefore, the note receivable from Dr. Cheung is not impaired.

The second agreement related to the Canada transaction involves the Transition Services Agreement. This agreement is between Celsion and Canada. The primary source of repayment of the Transition Services Agreement is from the assets of the corporate entity, with \$200,000 of the \$615,457 original balance being personally guaranteed by Dr. Cheung. Given that Canada has yet to raise the funds it has been seeking, repayment of amounts due under the Transition Services Agreement currently appears questionable. We have placed an allowance against this receivable for the amount that is deemed to be impaired.

It is important to note that there are two separate parties involved in these two transactions. A default by Canada resulting in failure to repay amounts due under the Transition Services Agreement in no way absolves Dr. Cheung of his personal obligation under the promissory note. Given Dr. Cheung's compliance with his obligations to date, the securities pledged, his stated intention to continue to meet his obligations, and his personal net worth, there is no basis to regard his debt as impaired, even though the Canada debt under the Transition Services Agreement may be impaired.

Note 6, Advances under the Celsion (Canada) Limited Transition Services Agreement, page 12.

Comment 4.

We see that you impaired all but \$200,000 of the amount due under the transition services agreement. Please further explain to us why the entire balance is not impaired. In that regard further explain to us how amounts due under the consulting agreement secure repayment of the advances. Also clarify why your rationale does not produce a result where a charge for a doubtful receivable is pushed to a future accounting period.

Response.

We have deemed the amounts due under the Transition Services Agreement to be impaired. We have placed a reserve against this receivable and valued the receivable on the basis of the underlying collateral. SFAS 114 requires that an impaired loan be measured on the basis of the discounted fair value of future cash flows or at the fair value of the collateral underlying the loan. Pursuant to the First Amendment to the Transition Services Agreement dated March 28, 2006, Dr. Augustine Cheung, Canada's Chairman and Chief Executive Officer, personally guaranteed the incremental advance of \$200,000. Therefore, in accordance with SFAS 114, we have valued the receivable at \$200,000.

Note 11, Discontinued Operations, page 14

Comment 5.

In future filings please disclose a schedule clarifying the calculation of the gain on the disposition of the Prolieve business.

Response.

As requested, we will include the schedule in future filings.

Comment 6.

Disclosure in the MD&A indicates that you provided a \$5 million liability for potential indemnifications under the Prolieve transaction. Please tell us and in future filings disclose how you estimated the amount provided. Explain why you believe that you made a reasonable estimate.

Response.

In accounting for this transaction, Celsion considered making a provision under SFAS 5 for the amount of the indemnification. But since no action has been filed and there might in fact never be an action, there was no basis for estimating the amount of a claim and thus a reserve. Further research aligned our circumstances with guidance under FIN 45 which requires recognizing a liability at fair value for Celsion's standing ready to perform under the indemnification agreement.

More specifically, Celsion has indemnified Boston Scientific Corporation (“BSC”) for up to \$15 million against any claims that may be brought against the Prolieve products through June 20, 2009. As of June 30, 2007 this indemnification did not meet the definition of a contingent liability per SFAS 5. That is, we could not state that a loss was probable nor could we make a reasonable estimate of the amount of any claims that may be made. Accordingly, we did not record a contingent liability for possible claims.

Although the amount of the indemnification was not recorded per SFAS 5, per FIN 45 the estimated fair value of standing ready to perform under the indemnification was recorded in the financial statements. As of June 30, 2007, the cost to transfer the \$15 million indemnification liability to an insurance carrier was estimated to be approximately \$5 million. Following the guidance of FIN 45, we have accrued the \$5 million as of June 30, 2007. As requested, we will update future filings to disclose the calculation of the estimate as necessary.

Comment 7.

As a related matter, please explain to us the basis in GAAP for presenting the \$5 million as a liability in your balance sheet. In connection with explaining the accounting rationale, please explain the terms and mechanics of the indemnification arrangement. For instance, explain the extent to which Celsion may be required to make payments under the indemnification. If indemnification obligations would be funded through a reduction of amounts received from Boston Scientific, please explain why the estimated potential reductions should not be presented as a reduction of the related note receivable from Boston Scientific. Also explain why the amount not recognized in earnings should not be characterized as a contingent gain under paragraph 17 to SFAS 5.

Response.

As noted in our response to Comment 6 above, the \$5 million accrued liability is the estimate of the fair value of standing ready to perform under the guarantee. It is not an estimate of any potential reductions of the amounts due from BSC.

The Asset Purchase Agreement with BSC specifies that the indemnifying party has the option of assuming and controlling the defense of any third party claims (except in instances of intellectual property claims, in which BSC can control the defense if it chooses). If Celsion elects not to defend the claim on its own, BSC can then offset funds that would be otherwise payable to Celsion to cover the cost of the defense. These potential reductions have not been recorded as a reduction of the amounts due from BSC because they do not meet the criteria of SFAS 5. SFAS 5 requires the recording of a contingent liability if it is both probable and reasonably estimated. Neither of those conditions applies to the potential claims.

In response to your question regarding why the amount not recognized in earnings should not be recognized as a contingent gain, we note that the full amount of the gain has been recorded in the financial statements. As noted above, the \$5 million accrued liability does not represent an estimate of any reductions that may be made against the BSC receivables. Rather, it is an estimate of the fair value of Celsion’s standing ready to perform under the indemnification guarantee to BSC. All conditions of the sale have been met and the full amount is due from BSC. The potential for a loss arising from the indemnification provision does not meet the criteria of SFAS 5 and is not recorded in the financial statements.

Comment 8.

We see the qualifying language in the last paragraph of the footnote. Your footnote should include full disclosure about all terms important to an understanding of the arrangement with BSC and the related accounting. Please disclose a representation that you have done so or remove the qualifying language from future filings.

Response:

Note 11 provides full disclosure of the terms that would be important to understanding the arrangement with BSC and the related accounting. We will remove the qualifying language in the footnote from future filings.

In responding to your comments, we acknowledge the following:

- Celsion is responsible for the adequacy and accuracy of the disclosures in our filings;
- Staff comments or changes to the disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- Celsion may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

If you have any questions regarding our response, please do not hesitate to call me at 410-290-5390.

Sincerely,

/s/ Anthony P. Deasey

Anthony P. Deasey
Chief Financial Officer